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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/037,560

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Eyal Dotan

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05/31/2006

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2136

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/037,560 | Applicant(s) DOTAN, EYAL | |
| | Examiner Brandon S. Hoffman | Art Unit 2136 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-16, 19, 21, 23, 24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-16, 19, 21, 23, 24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6, 8-16, 19, 21, 23, 24, and 26 are pending in this action.
2. Applicant's arguments, filed March 7, 2006, have been considered and are persuasive. However, a new ground of rejection is made.

Rejections

3. The text of those sections of Title 35, U.S. Code that are not included in this rejection can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1-6, 8-16, 19, 21, 23, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abraham et al. (U.S. Patent No. 5,446,903) in view of Beobert et al. (U.S. Patent No. 6,772,332).

Regarding claims 1 and 13, Abraham et al. teaches a process/computer-readable medium for protecting a computer from hostile code, the process comprising:

- Defining at least two trust groups, each of the defined trust groups being characterized by a trust group value (fig. 4, SECCATXX represents trust group values);

- Assigning objects and processes in the computer to one of said trust groups (fig. 4, SECCATXX and col. 11, lines 44-50);
- Defining an action rule for each combination of process trust group value, object trust group value, and object type (fig. 8); and
- Upon an access request by a requesting process to a target object, performing the action indicated by the action rule applicable to the trust group value of the requesting process, the trust group value of the target object, and the object type (fig. 15, ref. num 155).

Abraham et al. does not teach defining at least two object types or assigning an object type to each of the objects, nor does Abraham et al. specifically teach the assigning is done irrespective of the rights of a user of said computer.

Beobert et al. teaches defining at least two object types (col. 11, lines 37-41) and assigning an object type to each of the objects (col. 11, lines 37-41, objects are automatically assigned an object type) and the assigning is performed irrespective of the rights of a user of said computer (fig. 6-9).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine defining multiple object types and assigning an object type to each object, as taught by Beobert et al., with the process/medium of Abraham et al. It would have been obvious for such modifications because differentiating data

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based on object type provides further security of the data (see col. 11, lines 37-41 of Beobert et al.).

Regarding claim 2, Abraham et al. as modified by Beobert et al. teaches wherein a process is assigned upon creation to the trust group assigned to the passive code from which the process is created (see fig. 15, ref. num 159, inheritance of Abraham et al.).

Regarding claim 3, Abraham et al. as modified by Beobert et al. teaches further comprising changing the trust group of the process if the trust group value of the process is greater than the trust group value of the object (see fig. 12B, ref. num 116/117 of Abraham et al.).

Regarding claim 4, Abraham et al. as modified by Beobert et al. teaches further comprising changing the trust group of said object after performing said action (see fig. 13, ref. num 134 of Abraham et al.).

Regarding claim 5, Abraham et al. as modified by Beobert et al. teaches further comprising, upon creation of an object by a process, assigning said created object to the trust group of said process (see fig. 15, ref. num 159, inheritance of Abraham et al.).

Regarding claim 6, Abraham et al. as modified by Beobert et al. teaches further comprising defining at least two operation types and wherein said combination includes at least one of said operation types (see fig. 12B, ref. num 117 of Abraham et al.).

Regarding claim 8, Abraham et al. as modified by Beobert et al. teaches further comprising assigning said process to the trust group of said object if the trust group of said process is higher than the trust group of said object (see fig. 12B, ref. num 117, user can promote EC1 of Abraham et al.).

Regarding claim 9, Abraham et al. as modified by Beobert et al. teaches wherein upon a restart of said process, the trust group of said process reverts to the original trust group of the object from which the process was created (see col. 11, lines 49-50 of Abraham et al.).

Regarding claim 10, Abraham et al. as modified by Beobert et al. teaches further comprising: defining at least two process types; assigning processes to one of said process types; and wherein said combination includes at least one of said process types (see fig. 6, TURBXX and CARBXX of Abraham et al.).

Regarding claims 11 and 16, Abraham et al. as modified by Beobert et al. teaches wherein said object types comprise passive code and executable code (see col. 11, lines 37-41 of Beobert et al.).

Regarding claims 12 and 15, Abraham et al. as modified by Beobert et al. teaches wherein said operation types comprise open, read, create, modify, and delete (see fig. 12B, ref. num 117 of Abraham et al.).

Regarding claim 14, Abraham et al. as modified by Beobert et al. teaches further comprising instructions causing the computer to: define a table of types of at least two types of objects, the objects in the computer being assigned one type; and wherein said plurality of rules defines said actions further based on the type of said object (see col. 11, lines 37-41 of Beobert et al. and fig. 8 of Abraham et al.).

Regarding claims 19 and 21, Abraham et al. as modified by Beobert et al. teaches wherein the computer is operatively coupled to a network, the network including a server, the table of trust groups/rules is stored in said server (see abstract of Beobert et al.).

Regarding claim 23, Abraham et al. teaches a computer comprising:

- A random access memory (fig. 1, ref. num 18);
- A non-volatile memory (fig. 1, ref. num 23);
- A processor coupled to said RAM and said non-volatile memory (fig. 1, ref. num 17);
- Wherein said non-volatile memory comprises:
 - A list of rules, each rule defining an action based on an object type (fig. 8);

- A list of object trust groups, each trust group defining an object trust value and coupled to at least one of said rules (fig. 4, SECCATXX represents trust group values); and
- . Wherein when a process is created in said RAM from an originating object of one of said objects, said processor assigns to said process a process trust value equal to the object trust value of said originating object (fig. 15, ref. num 159, inheritance).

Abraham et al. does not teach a list of object types or a plurality of objects, each of said objects having an object type and assigned to one of said trust groups.

Beobert et al. teaches a list of object types (col. 11, lines 37-41) and a plurality of objects, each of said objects having an object type and assigned to one of said trust groups (col. 7, lines 37-41).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a list of object types and a plurality of objects each being assigned to an object type, as taught by Beobert et al., with the computer of Abraham et al. It would have been obvious for such modifications because differentiating data based on object type provides further security of the data (see col. 11, lines 37-41 of Beobert et al.).

Regarding claim 24, Abraham et al. as modified by Beobert et al. teaches further comprising a controller receiving operation requests from said process to be performed on a target object of one of said objects and, upon receiving said requests said controller access said list of object trust groups, list of rules, and list of object type to determine whether to allow the operation (see fig. 15, ref. num 153-155 of Abraham et al.).

Regarding claim 26, Abraham et al. as modified by Beobert et al. teaches wherein the controller allows the operation request but the process trust value is lower than the target object trust value, said processor resets the process trust value equal to that of the target object trust value (see fig. 15, ref. num 159 of Abraham et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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